



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

It would probably have been better from the classroom standpoint if Professor Olmsted had divided a good many of the lessons into two. In Lesson V, for example, the student is to learn seven uses of the article, the names of the seasons, and the days of the week, and the present indicative negative and negative interrogative of *être*; in XII and XIII he is confronted by the formidable rules for gender and by long lists of masculines and feminines; and XVI has a vocabulary of twenty-nine words, a list of sixteen adjectives in two forms, five rules for adjective agreement, the conditional form of five verbs, and a rule for tense-usage. This is obviously too much material to set before the student at once, and there is nothing in the nature of the subjects which makes it necessary to crowd them into a single chapter.

The teacher of beginning French classes who anxiously examines each new grammar, hoping to find his many difficulties lightened, will be grateful to Professor Olmsted for providing him with an interesting and unusually complete textbook. He may find other strictures to add to the above—for example, that the volume contains no clear summary of the principles of tense-usage—but he will welcome the book as a serious effort by a competent teacher to set forth the leading facts of French grammar in accord with the trend of recent pedagogy.

A. COLEMAN

UNIVERSITY OF CHICAGO

---

*Chemical Calculations.* By R. HARMAN ASHLEY. New York: D. Van Nostrand Co., 1915. Pp. v+384. 12mo, cloth. \$2.50.

The subject-matter of this book is divided into ten chapters whose headings are as follows: "Ratios," "Approximate Numbers," "Interpolation," "Heat," "Specific Gravity," "Gas Calculations," "Calculation of Atomic Weights and Formulas," "Gavimetric Analysis," "Volumetric Analysis," and "Use of Specific Gravity Tables and Acid Calculations."

Besides giving a goodly number of problems and their answers under each of the foregoing topics, the author has endeavored to present in the initial pages of each chapter the principles underlying the solution of the problems that follow. Concrete illustrations, showing how these principles are to be applied, are also given in this connection. Much space is devoted to the subjects of "ratios" and "factors." The author regards the time-honored way of writing proportions as unfortunate, and attempts to wean the student from its use. Again, considerable effort is spent in developing general formulas which may later be used as stencils, as it were, for the solution of problems of a certain type. So, for instance, in connection with Dalton's law of partial pressures about four pages are devoted to the development of such a general formula which is to be used in the solution of problems that follow. Any teacher of experience knows that this is not the way to teach the subject to a student, for, in the first place, this long-drawn-out general development, by means of algebraic

symbols to which are attached cumbersome subscripts and index marks, is uninviting and quite unnecessarily confusing; and then after this formula, the stencil, has finally been made, the solution of the problems becomes routine in character. Indeed, the formula may be used in solving the problems without really understanding its complete significance at all.

It is a mistake to think that chemical arithmetic is different from any other kind of arithmetic. The student ought to solve his chemical problems by means of the same principles of arithmetic that were taught him to handle problems that arise in business or anywhere else. In his work in the chemical laboratory, he ought to be encouraged to use the arithmetic which he learned in the lower schools. The old-fashioned way of writing proportions is a very excellent one to use in calculating chemical problems, but if the student has been taught to solve his problems by the so-called analysis method, let him use that method. If he has had good training in arithmetic, he will readily understand what is meant by the "factors" which are used in some of the books containing numerical chemical data. The matter of "ratios" will offer nothing new or difficult to him. On the other hand, if his arithmetical training has been inadequate, this defect must first be remedied, and it cannot very well be done by inculcating pet ways of solving chemical problems. It is safe to say that no chemist of note has learned to solve chemical problems in such a way.

The solution of chemical problems is best taught at the laboratory desk when such problems arise, making use of the arithmetical methods with which the pupil is already familiar. There is indeed no crying need for special texts on chemical calculations or chemical arithmetic. Such books do, indeed, offer a variety of problems for drill work, and in so far they are helpful, especially to the busy teacher who often lacks the time to devise his own problems. On the other hand, books of this kind generally contain many problems that never arise in practical work, and the present volume is no exception to this.

The volume is neatly printed on good paper, and the binding is in keeping with the other mechanical features of the book.

LOUIS KAHLENBERG

UNIVERSITY OF WISCONSIN

---

*The Principles of Evolution.* By JOSEPH McCABE. Baltimore: Warwick & York. Pp. 264. \$0.40.

This is one of a series of popular presentations of great subjects in "The Nation's Library." The latter is an English project, our American firm co-operating in handling the series. The author is a writer rather than a scientist, and previously published the *Story of Evolution*, the *Evolution of Mind*, etc. The little handbook is a very good statement of evolution and its bearing in philosophy. It is impossible to outline the course of evolution and the evidence of it in so small a book, taking account not only of organic evolution,